

## METHOD AND SYSTEM FOR ANALYZING HYDRAULIC TURBINE VIBRATIONS

### ABSTRACT

A method and system for analyzing hydraulic turbine noise vibrations involves recording the noise of a hydraulic turbine either during operation or intentionally produced for testing from a remote site. A standard laptop computer is utilized by personnel at the turbine site to record the sound at different power outputs as specified by turbine experts with a standard Windows sound recording program that produce sound files. The sound files are compressed at the site and sent to the expert office location via Email. Once received at the expert location, the sound files are uncompressed and analyzed immediately by the turbine experts without the experts having had to travel to the remote site. The analysis is done with a software sound analyzer. The analyzed signals are used to diagnose the machine and address any unusual recorded noise.